

Application No. 10/053,208

IN THE CLAIMS

It is noted that claims 16, 19, 21 and 23-63 were pending in the application prior to the present amendment.

The Examiner is respectfully requested to amend claims as indicated in the listing of all claims, which follows.

Claims 1-15 (cancelled)

Claim 16 (currently amended): An AA7000 series aluminum alloy having improved as-cast surface quality, said alloy is comprised of from about 5 to about ~~100~~ 75 ppm calcium, from about 0.001% to about 0.25% grain refiners, and being essentially beryllium-free.

Claims 17-18 (cancelled)

Claim 19 (previously amended): The aluminum alloy as claimed in claim 16 wherein the grain refiners are selected from the group consisting of Ti, Sr, B and C.

Claim 20 (cancelled)

Claim 21 (original): An ingot cast from the aluminum alloy of claim 16.

Claim 22 (cancelled)

Claim 23 (currently amended): The alloy of claim 16, wherein the concentration of calcium is from about 10 to about ~~100~~ 75 ppm calcium.

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Claim 24 (currently amended): The alloy of claim 16, wherein the concentration of calcium is from about 15 to about ~~100~~ 75 ppm calcium.

Claim 25 (previously presented): The alloy of claim 16, wherein the concentration of grain refiners is from about 0.1 to about 0.25 wt.%.

Claim 26 (previously presented): The alloy of claim 16, wherein titanium is a grain refiner and the concentration of titanium is from about 0.0002 to about 0.20 wt.%.

Claim 27 (previously amended): The alloy of claim 16, wherein titanium is a grain refiner and the concentration of titanium is from about 0.0003 to about 0.10 wt.%.

Claim 28 (currently amended): The alloy of claim 16, wherein boron is a grain refiner and the concentration of boron is about from about 0.0001 to about 0.03 wt.%.

Claim 29 (currently amended): The alloy of claim 16, wherein boron is a grain refiner and the concentration of boron is ~~about~~ from about 0.0001 to about 0.01 wt.%.

Claim 30 (currently amended): The alloy of claim 16, wherein boron is a grain refiner and the concentration of boron is ~~about~~ from about 0.0003 to about 0.005 wt.%.

Claim 31 (currently amended): The alloy of claim 16, wherein carbon is a grain refiner and the concentration of carbon is ~~about~~ from about 0.00001 to about 0.001 wt.%.

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Claim 32 (currently amended): The alloy of claim 16, wherein carbon is a grain refiner and the concentration of carbon is ~~about~~ from about 0.000015 to about 0.0004 wt.

Claim 33 (previously presented): The alloy of claim 16, wherein titanium is a grain refiner at a concentration from about 0.0002 to about 0.20 wt.% and boron is a grain refiner at a concentration from about 0.0001 to about 0.03 wt.%.

Claim 34 (previously presented): The alloy of claim 16, wherein titanium is a grain refiner at a concentration from about 0.0002 to about 0.20 wt.% and carbon is a grain refiner at a concentration from about 0.00001 to about 0.001 wt.%.

Claim 35 (previously presented): The alloy of claim 34, wherein the concentration of calcium is from about 8 ppm to about 14 ppm.

Claims 36-42 (cancelled)

Claim 43 (currently amended): An aluminum alloy having improved as-cast surface quality, said alloy consisting essentially of: about 5.7 to about 6.7 wt.% zinc, about 2.0 to about 2.6 wt.% copper, about 1.9 to about 2.6 wt.% magnesium, about 0.08 to about 0.15 ~~about~~ wt % zirconium, about 5 to about ~~5,000~~ 75 ppm calcium, about 0.001 to about 0.25 wt.% grain refiners, the balance essentially aluminum with incidental elements and impurities, and being essentially beryllium-free.

Claim 44 (currently amended): The alloy of claim 43, wherein the concentration of calcium is from about 15 to about ~~500~~ 75 ppm calcium.

Claim 45 (previously presented): The alloy of claim 43, wherein the grain refiners are selected from the group consisting of titanium, strontium, boron and carbon.

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Claim 46 (previously presented): The alloy of claim 43, wherein titanium is a grain refiner at a concentration from about 0.0002 to about 0.20 wt.% and boron is a grain refiner at a concentration from about 0.0001 to about 0.03 wt.%.

Claim 47 (previously presented): The alloy of claim 43, wherein titanium is a grain refiner at a concentration from about 0.0002 to about 0.20 wt.% and carbon is a grain refiner at a concentration from about 0.00001 to about 0.001 wt.%.

Claim 48 (previously presented): The alloy of claim 47, wherein the concentration of calcium is from about 8 ppm to about 14 ppm.

Claim 49 (previously presented): An ingot cast from the aluminum alloy of claim 43.

Claims 50-56 (cancelled)

Claim 57 (currently amended): An aluminum alloy having improved as-cast surface quality, said alloy consisting essentially of: about 7.6 to about 8.4 wt.% zinc, about 2.0 to about 2.6 wt.% copper, about 1.8 to about 2.3 wt.% magnesium, about 0.08 to about 0.25 zirconium, about 5 to about ~~5,000~~ 75 ppm calcium, about 0.001 to about 0.25 wt.% grain refiners, the balance essentially aluminum with incidental elements and impurities, and being essentially beryllium-free.

Claim 58 (currently amended): The alloy of claim 57, wherein the concentration of calcium is from about 15 to about ~~500~~ 75 ppm calcium.

Claim 59 (previously presented): The alloy of claim 57, wherein the grain refiners are selected from the group consisting of titanium, strontium, boron and carbon.

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Claim 60 (previously presented): The alloy of claim 57, wherein titanium is a grain refiner at a concentration from about 0.0002 to about 0.20 wt.% and boron is a grain refiner at a concentration from about 0.0001 to about 0.03 wt.%.

Claim 61 (previously presented): The alloy of claim 57, wherein titanium is a grain refiner at a concentration from about 0.0002 to about 0.20 wt.% and carbon is a grain refiner at a concentration from about 0.00001 to about 0.001 wt.%.

Claim 62 (previously presented): The alloy of claim 61, wherein the concentration of calcium is from about 8 ppm to about 14 ppm.

Claim 63 (previously presented): An ingot cast from the aluminum alloy of claim 57.